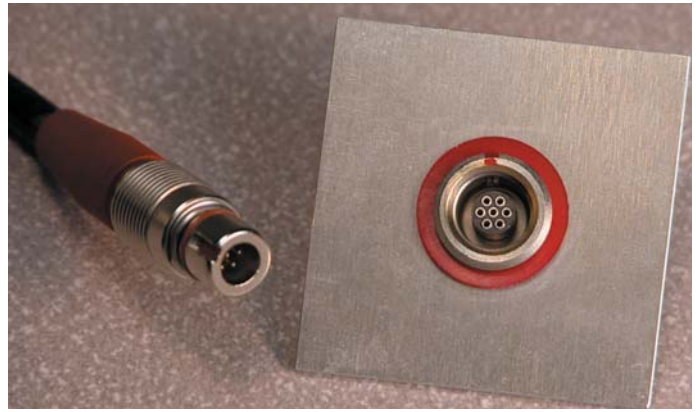




Electronics

Metal-Shell Micro Circular



DESCRIPTION

- Small, circular connector for Medical and Industrial applications
- 2 shell sizes M11 (7 pos.) and M14 (19 pos.)

KEY FEATURES

- Push to mate, pull to release coupling mechanism
- High performance at lower cost
- High density for limited space applications
- Multiple shell sizes and keying configurations

ELECTRICAL

- Current Carrying Capacity: 2 Amp
- Operating Voltage: 200 VAC max.

MECHANICAL

- Push/pull, positive lock coupling
- 500 minimum mating cycles with screw machine pin and socket contacts
- 5000 minimum mating cycles with spring probe contacts

MATERIALS

- Spring Probe Pin: Brass, 10 $\mu\text{in.}$ [.25 μm] gold finish over nickel on mating end, tin-lead over nickel on solder cup/tail
- Spring Probe Pad: Brass, 30 $\mu\text{in.}$ [.76 μm] gold finish over nickel on entire contact
- Screw Machine Pin: Brass, 30 $\mu\text{in.}$ [.76 μm] gold finish over nickel on entire contact

APPLICATIONS

- Medical Equipment, Instrumentation, Military and Aerospace
- Rugged Industrial Environments
- Outdoor Applications

- Resistant to autoclaving (1000 cycles @ 275°F [135°C]) or chemical sterilization (500 cycles)
- Precision, screw machine contacts
- No assembly or application tools required
- Environmentally sealed in mated condition (IP67) and shielded

- Termination Resistance: 20 mOhm max.

- Overmold or heat-shrink tubing for sealing and strain relieving
- Wire Size: 24-30 AWG [0.2-0.06 mm²]
- Termination: Solder
- Max. Operating Temperature: 300°F [149°C]

- Screw Machine Socket:
 - Brass body: beryllium copper clip, 30 $\mu\text{in.}$ [.76 μm] gold flash over nickel
 - Clip: tin-lead over nickel body
- Housing: Nickel plated brass
- Insulator: High temperature thermoplastic, white

FOR MORE INFORMATION

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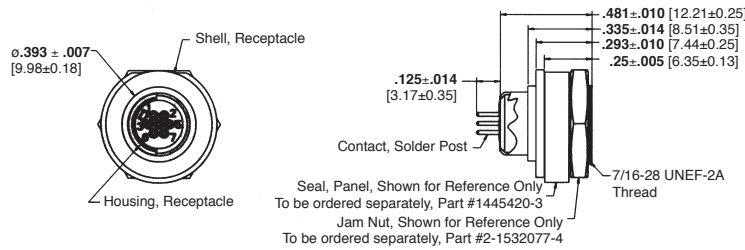
In Development

Metal-Shell Micro Circular

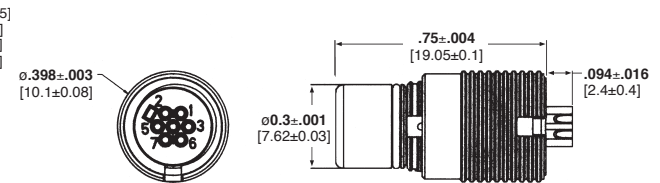
PRODUCT DIMENSIONS

Shell Size M11 (7 Position shown)

Receptacle Assembly, Rear Panel Mount, Solder Tail

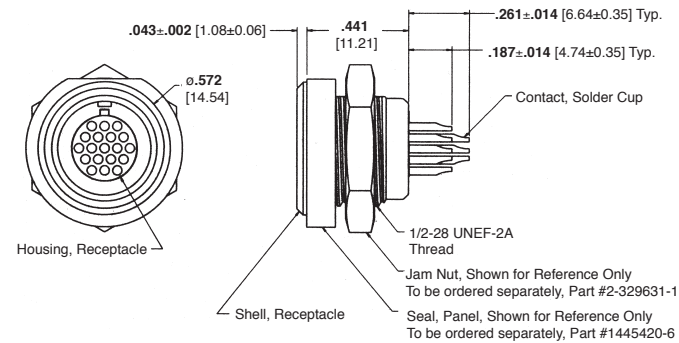


Plug Assembly

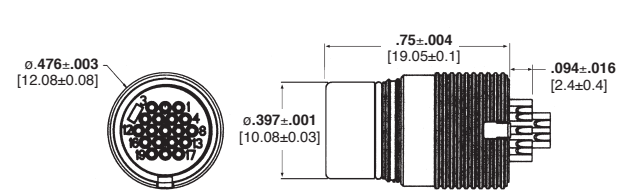


Shell Size M14 (19 Position shown)

Receptacle Assembly, Front Panel Mount, Solder Cup

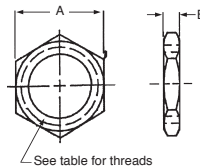


Plug Assembly



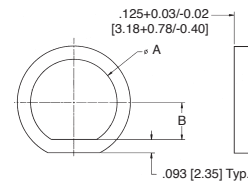
Jam Nuts

Shell Size	Dimensions		Thread	Part Number	Panel Mount
	A	B			
M11	0.500 [12.7]	0.093 [2.36]	7/16-28 UNEF-2B	1604197-1	Rear
	0.500 [12.7]	0.125 [3.18]	3/8-32 UNEF-2B	1-330249-1	Front
M14	0.750 [19.05]	0.093 [2.36]	9/16-24 UNEF-2B	1811277-3	Rear
	0.563 [14.29]	0.093 [2.36]	1/2-28 UNEF-2B	2-329631-1	Front



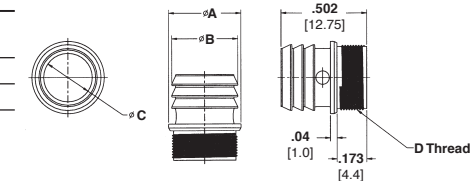
Panel Seals

Shell Size	Dimensions		Part Number	Panel Mount
	A	B		
M11	0.430 [10.9]	0.177 [4.5]	1445420-3	Rear
	0.364 [9.25]	0.165 [4.2]	1445420-4	Front
M14	0.551 [14.0]	0.236 [6.0]	1445420-5	Rear
	0.492 [12.5]	0.207 [5.25]	1445420-6	Front



Overmold Adapter

Shell Size	Dimensions			Thread	Part Number
	A	B	C		
M11	.326 [8.29]	.295 [7.5]	.193 [4.9]	5-16 - 32 UNEF-2A	1604366-4
M14	.424 [10.76]	.385 [9.8]	.283 [7.2]	0.380-64 Special	1604366-3



PRODUCT OFFERING

Contact System	Shell Size	No. of Pos.	Front Panel Mount Receptacle		Rear Panel Mount Receptacle		Plug Solder Cup
			Solder Cup	Solder Tail	Solder Cup	Solder Tail	
Spring	M11	7	1604446-1	1604440-1	1604443-1	1604215-1	1604213-1
Probe	M14	19	1738477-1	1604449-1	1604472-1	1604444-1	1604481-1
Pin &	M11	7	1604448-1	1604527-1	1604502-1	1604392-1	1604515-1
Socket	M14	19	1604471-1	1604441-1	1604480-1	1604131-1	1604512-1